

REMARKS

This is in response to the Office Action dated November 2, 2004. Claims 1-4 are pending.

Claim 1 stands rejected under 35 U.S.C. Section 102(b) as being allegedly anticipated by Kato. This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires that " the size along the substrate surface in the lateral direction of each of the light-focusing parts becomes gradually larger, as the location of the light-focusing part is getting closer to the peripheral camera region from the middle camera region on the substrate in the front of the exit pupil." In other words, the size of the lenses or light-focusing parts becomes gradually larger toward the periphery. The cited art fails to disclose or suggest the aforesaid underlined aspect of claim 1.

Kato fails to disclose or suggest that the size of the lenses or light-focusing parts becomes gradually larger toward the periphery as required by claim 1. Kato discloses a solid state imaging device including an array of light receiving parts 2 and a corresponding array of focusing microlenses 3 (e.g., col. 4, lines 54-57). Kato explains that the "shape" of the lenses may change moving toward the periphery, so that curvature and thus power of the lenses may be increased toward the periphery of the device (e.g., col. 3, lines 20-24; and col. 5, lines 47-51). However, Kato fails to disclose or suggest changing the size of the lenses to make them "larger" in size moving toward the periphery as required by claim 1. While Kato states that shape may change, there is no disclosure of making the size of the lenses larger in the lateral direction toward the periphery as required by claim 1.

Moreover, it will be seen that Kato actually teaches directly away from the invention of claim 1. In Kato, in order to increase curvature and thus the power of the lenses, the size of the

lenses in Kato in the direction along the substrate would become smaller (the opposite of "larger" required by claim 1) moving toward the periphery, or the thickness would increase. Thus, it can be seen that Kato actually teaches the direct opposite of what claim 1 requires. Kato would change lens size by making lenses smaller toward the periphery, whereas the invention of claim 1 requires the opposite since it requires that the size of the lenses becomes larger toward the periphery. Kato is entirely unrelated to the invention of claim 1 in this regard.

In the Office Action dated November 2, 2004, the Examiner contends that "it would be inherent that when the micro-lenses arranged on the periphery of the screen are arranged at intervals shorter than compared to the center as taught in Kato (col. 5 lines 21-26), the size of the micro-lenses will have to increase because the location of the pixels does not change." This contention by the Examiner is incorrect. Kato is directed toward a solid-state image sensing device in which a photo-taking lens is in a non-telecentric state (col. 1, line 56 to col. 2, line 39; col. 2, lines 44-48; Fig. 2). In a conventional solid-state image sensing device in a "non-telecentric" state, since micro lenses are aligned to photo cells, most of the light condensed by micro lens may not enter photo cells at the peripheral portion of the image sensing surface (Fig. 4). Kato has allegedly solved this problem by arranging micro lenses on the periphery of the screen at an interval shorter than the interval at which the micro lenses are disposed at the center of the screen in order to improve the micro lens function of condensing light to the photo cells (col. 5, lines 21-26, and Fig. 2). Accordingly, it is *not* inherent that when the lenses arranged on the periphery are arranged at shorter intervals the size of the lenses will increase. Moreover, Kato nowhere teaches or suggests that the size of the lenses or light-focusing parts becomes larger toward the periphery as recited in claim 1.

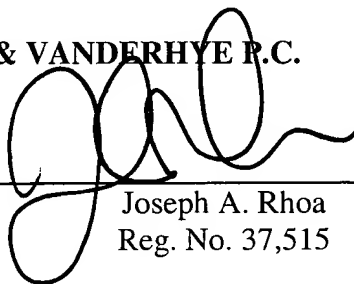
Additionally, since it is difficult to increase the size of micro lenses when an interval becomes shorter, it is submitted that one of ordinary skill in the art would never think of simultaneously decreasing the interval and making the size larger toward the periphery. Accordingly, one of ordinary skill in the art would not have modified Kato to meet the invention of claim 1.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

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